

A mechanisms approach to physical therapy management of pain

Sluka KA (Ed) (2009) Mechanisms and management of pain for the physical therapist. IASP Press, 394 pages.

Kathleen Sluka is a well regarded educator and researcher who has published over 100 peer-reviewed papers. She has provided a voice for the role of physical therapy in pain through national (USA) and international professional bodies including the International Association for the Study of Pain (IASP). This book draws on material that she has prepared for a doctoral course titled 'Mechanisms and Management of Pain'; as such Dr Sluka edits the text and is the first author on the large majority of chapters. Other contributions are provided by a mix of American, European, and Australasian authors.

The target audience of the book is students of physical therapy and physical therapists who treat people with pain. While other health professionals would also find the book useful, the text is quite discipline-specific in parts.

Dr Sluka's Preface is informative. She summarises the human pain experience as involving three mechanism-based categories: 1) peripheral mechanisms that drive pain, ie, acute pain, 2) central mechanisms that drive pain, ie, chronic pain, and 3) a combined category, ie, subacute/chronic.

The opening section (the book is divided into four parts) provides definitions of common terms and a brief introduction to important explanatory theories and models, including the useful International Classification of Functioning, Disability and Health (ICF). This is followed by extensively referenced chapters on pain mechanisms, using human and animal research evidence to support description of peripheral and central processes.

A highlight is the well worked chapter on pain variability, which reminds us that we cannot embed our personal pain experiences in our interpretation of the pain experience of others. This emphasises that the complexity of the pain experience might be more important to assess than duration of the pain. This perhaps contradicts the simplistic – but well accepted – categorisation of pain based on duration proposed by Dr Sluka in the preface.

The middle sections of the book address assessment and treatment including a section devoted to interdisciplinary management. The chapters include exercise, transcutaneous electrical nerve stimulation and interferential therapy (reflecting Dr Sluka's research interests), manual therapy, medical management, and psychological approaches. The

presentation of common tools of pain assessment and treatment is well done, although the application of these may be enhanced by reintroducing the models of pain described in earlier sections e.g. as per the ICF in the IASP-recommended curricula.

It was somewhat disappointing that the consideration of the more physical therapy modalities did not include analysis of their psychological or neuroplastic potential. Once we understand the variability of pain (Chapter 4), it is improbable that an intimate treatment interaction or particular modality of treatment will not influence non-specific treatment effects. For example, focusing on the hypoalgesic effects of exercise without incorporating the potential for learning (ie, challenging concepts of re-injury) and fear-reduction through physical activity seems not to align with some of the earlier sentiments of the book.

The final section of the book considers pain 'syndromes' and some case studies. These are valuable as they present the complexity of some common pain conditions and also illustrate how some of the assessment and treatment approaches might be applied.

In summary, this book is an ambitious attempt to capture the complexity of the human pain experience and explain how physical therapists can apply an evidence-based approach to manage pain. It is well structured and well researched and, for the most part, is likely to be valuable for its intended target audience. This reviewer considers the categorisation of pain into acute, subacute, and chronic (and associating pain mechanisms to them) as inadequate, as it often simplifies clinical reasoning to chronology. That is, it can promote the untimely management of complex pain presentations in a person with frank acute tissue damage, and discourage the proper somato-visceral evaluation and management where pain persists and tissue damage is not apparent; but this is not the common view. Maintaining the focus on pain mechanisms – without the categorisation – would be a preferred approach, and the main elements of this book could easily facilitate this. In light of this, and given the evidence of inadequate pain education in physical therapy programs, Dr Sluka's book has the potential to extend and enhance physiotherapists' management of pain.

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